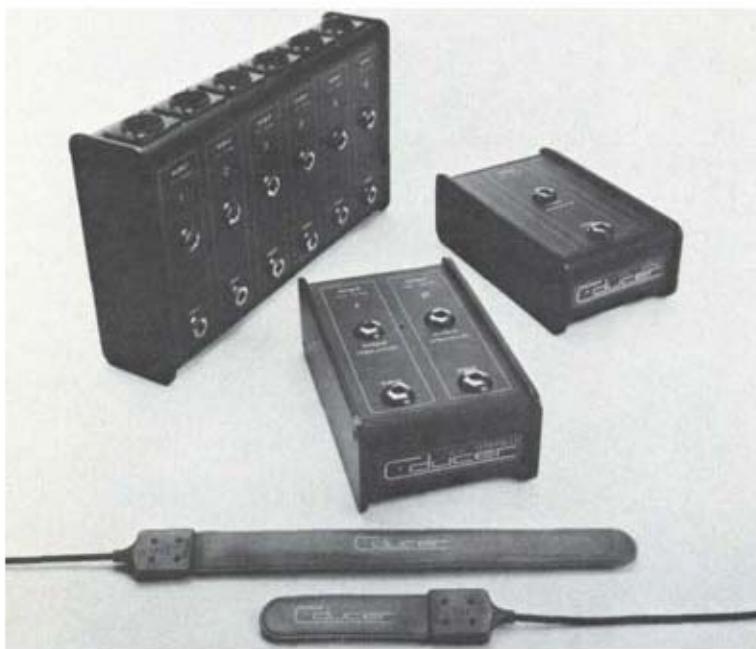


by Bob Saylowski, Jr.



My July column took a look at the *Cactus Drums*, distributed in the U.S. by C-Tape Developments. After that review, I found that C-Tape also handles a contact miking system for drums, produced in the U.K., and quite worthy of mention in these pages.

The *C-Ducer*'s inventors originally set out to find a way to effectively mike cymbals, but then shelved the idea in favor of miking drums instead. The *C-Ducer CX6* is a six-piece miking setup, utilizing flexible tape microphones and a preamplifier. Each tape mic' is a contact electret transducer, 5/8" wide and approximately one millimeter thick. It is sandwiched between two layers of flexible plastic, enabling it to conform easily to the contours of a drumshell or hoop. The tape is sensitive over its entire length, rather than just one spot, as is the case with regular transducer mic's. The *CX6* tapes are eight inches long; three-inch tapes are also available. Double-sided adhesive tape is used to affix each contact mic' to the shell's interior.

Depending on where the strip is adhered, there are subtle differences in the resulting miked sound. Attaching the *C-Ducer* near the batter head and parallel to it gives an increased stick attack sound in combination with the drum tone. Moving further down the shell, there is more drum resonance and less impact sound. A more or less "diagonal" mounting blends the two. A trial-and-error method is really the only way to find the optimum sound you're looking for.

Each contact tape has a permanently attached cable with a 1/4" male plug on its

end. The cable itself is specially constructed, with two shields to eliminate hum or R.F. pickup, yet is very thin and flexible. With double-headed drums, it is possible to pass the cable through the venthole in the shell to reach the pre-amp. If desired, you can permanently mount the *C-Ducer* by installing a jack in the drumshell itself (like the *May EA* system). This would involve cutting off the male plug and wiring the mic' directly to the jack. Instructions for this are included in the handbook that accompanies the *CX6* system.

The *CX6* pre-amp is a small, six-channel metal box that can either be phantom-powered or operated by a simple AC power supply that C-tape has available. The face of the unit has 1/4" input jacks for each mic', plus 1/4" Hi-Z output jacks. If your mixing board is low-impedance, the rear of the pre-amp has 3-pin XLR output jacks, as well. A small recessed screw adjustment is provided underneath the unit at each channel to set individual mic' levels (rather inconvenient, in my opinion). There are no tone settings available. This has to be done in the mixing stage. Single- and dual-channel pre-amps are also available.

Because of their low mass, *C-Ducers* have a minimal effect on tone and acoustic vibration of the shell, and in fact, give an accurate reproduction of sound as heard from the inside of the drum (including hardware noises). When placed on rack toms, I found that total separation is difficult to achieve because of vibrations from the tom-tom holder. However, isolating

## C-Ducer Miking System

the drums from these vibrations by using rubber padding between the drum and holder mount will mostly cure the problem. (The *RIMS* mounting system may work ideally here, too.) Since contact miking gives a "tight" sound, one may also choose to use outside overhead mic's to add some natural ambience.

C-Tape does not recommend the *C-Ducers* for use on snare drums, because for some reason, an accurate sound is not produced. I tried it anyway inside a 6 1/2" wooden-shell drum, and found that the resulting sound bordered between acoustic and electronic! *C-Ducers* also work well on Latin percussion instruments, such as bongos, congas, timbales, etc., by mounting the mic's either on the inside of the shell, or (if there's enough room) on the outside collar of the head. (Hmmm . . . wonder how *PTS* heads mounted by themselves would sound.) Given its thin, flexible characteristics, a *C-Ducer* could be used to mike *anything*. (Rolls-Royce used *C-Ducers* to test resonance emissions from aircraft wings!)

The *C-Ducer* tape mic's are studio-quality, and seem to be extremely accurate. Once you've found the "sweet spot" in each drum, they are nothing short of incredible. They are effective both live and in studio recording, and also provide a solution to the usual clutter of mic' stands around the drumkit. The *CX6* system includes six tape mic's and pre-amp, all housed in a nice little carrying case, plus an AC-operated power supply. Retail price is \$675.00.